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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/790,762 | 03/03/2004 | Osamu Tsuboi | 040090 | 5141 |
| 23850 | 7590 | 10/11/2005 | EXAMINER | |
| ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP | | | TAMAI, KARL I | |
| 1725 K STREET, NW | | | ART UNIT | PAPER NUMBER |
| SUITE 1000 | | | | |
| WASHINGTON, DC 20006 | | | 2834 | |

DATE MAILED: 10/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H-1

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/790,762 | TSUBOI ET AL. | |
| | Examiner | Art Unit | |
| | Tamai I.E. Karl | 2834 | |

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-30 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) ____ is/are rejected.
 7) Claim(s) ____ is/are objected to.
 8) Claim(s) 1-30 are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1 and 13, drawn to an actuator with dual non-orthogonal drives, classified in class 359, subclass 291.
 - II. Claims 2-6, drawn to an actuator with dual drives at different distance from the axis of rotation, classified in class 359, subclass 224.
 - III. Claim 7, drawn to an actuator with the driving force changing in distance to the axis of rotations continuously, classified in class 318, subclass 116.
 - IV. Claims 8-12 and 14, drawn to an actuator with comb electrodes layered in the direction of rotation, classified in class 310, subclass 309.
 - V. Claims 15-19, drawn to a method of driving a comb actuator in two directions, classified in class 318, subclass 116.
 - VI. Claims 20-30, drawn to a method of driving a comb actuator where the combs are at different distances from the axis of rotation, classified in class 318, subclass 116.
2. Inventions Group I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention Group I has separate utility such as an apparatus with the drive mechanisms the same distance from the axis of rotation and Group II has separate utility as an apparatus with orthogonal axis. See MPEP § 806.05(d).

Inventions Group I and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention Group I has separate utility such as an apparatus with the drive mechanisms where the force does not change continuously and Group III has separate utility as an apparatus with orthogonal axis. See MPEP § 806.05(d).

Inventions Group I and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention Group I has separate utility such as an apparatus with the drive mechanisms with a single layer of electrodes and Group IV has separate utility as an apparatus with orthogonal axis. See MPEP § 806.05(d).

Inventions Group II and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention Group II has separate utility such as an apparatus with the drive mechanisms where the force does not change continuously and Group III has separate utility as an apparatus with the drive mechanisms the same distance from the axis of rotation. See MPEP § 806.05(d).

Inventions Group II and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention Group II has separate utility such as an apparatus with the drive mechanisms with a single layer of

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electrodes and Group IV has separate utility as an apparatus with the drive mechanisms the same distance from the axis of rotation. See MPEP § 806.05(d).

Inventions Group III and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention Group III has separate utility such as an apparatus with the drive mechanisms with a single layer of electrodes and Group IV has separate utility as an apparatus with the drive mechanisms where the force does not change continuously. See MPEP § 806.05(d).

Inventions Groups I, II, III, and IV and Groups V and VI are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case apparatus of Groups I-IV can be used in a materially different manner, different steps of operation or with different tooth configurations than set forth in Claims 15-30.

Inventions Group V and VI are related as processes of using comb actuators which are unrelated. Group V requires a first comb tooth and second comb tooth actuator with two step in a method of rotation for a first direction using the second and third conductor and for a second direction by the first and third conductors, where the third conductor is not aligned with the second conductor when not driven, which is not required of Groups VI. Group VI requires a third and fourth comb tooth electrode closer

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to the axis of rotation than a first and second comb tooth electrode with method of rotations steps including a first direction by the first and second, and the third and fourth electrodes followed by rotation in the first direction by the third and fourth electrodes, which is not required of Groups V.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and because they a separate status in the art because of their recognized divergent subject matter as specifically noted in the preceding paragraph, restriction for examination purposes as indicated is proper.

4. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai whose telephone number is (571) 272 - 2036.

The examiner can be normally contacted on Monday through Friday from 8:00 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Darren Schuberg, can be reached at (571) 272 - 2044. The facsimile number for the Group is (571) 273 - 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Karl I Tamai
PRIMARY PATENT EXAMINER
October 7, 2005

KARL TAMAI
PRIMARY EXAMINER